Keeping it Going: Financing Options for your Clean Energy Programs

Webcast Transcript

June 13, 2012

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Webcast Agenda and Meeting Logistics

Slide 1: Introduction Slide

Operator: Good afternoon, my name is Vanessa and I will be your conference operator today. At this time I would like to welcome everyone to the Financing Clean Energy Program conference call. All lines have been placed on mute to prevent any background noise. Should anyone need assistance during the call, please press star then zero and an operator will be back online to assist you. I will now like to turn the call over to Ms. Neelam Patel. Please, go ahead, Madam.

Neelam Patel: Thank you. Hi, my name is Neelam Patel. And I'd like to welcome you on behalf of myself and the U.S. EPA Local Climate and Energy Program to the final webcast in a series of three on Funding and Financing Clean Energy Program.

Slide 2: Webcast Agenda

In this series, we get the holistic approach to providing information how to fund and finance to your program. And today we're going to provide you with some background on financing options with some additional information on a tool that can help you make decisions on which financing programs to invest in. And then we'll have two case studies, the first by Keith Canfield from the Clinton Climate Initiative in Little Rock, Arkansas. And Keith will be talking about the home affordability energy loan which is the model that the Clinton Climate Initiative is interested in replicating in other communities.

After Keith's presentation, we will have Yvette Rincon and James Christensen from the city of Sacramento talking about their program in terms of installing solar in the cost effective way. And they will be sharing some of their lessons from the first phase of their program.

After you've heard from Pat McGuckin from the Cadmus Group, contractor to the U.S. EPA talking about the overview of financing options and heard from Niko Dietsch who will describe a tool that helps to make decisions. In addition to the case studies, what we'll do is we'll try to put that together for you, not only pulling in the information you've heard today but also information from our first two Webcasts.

After all the presentations, there will be a question and answer session. And as you exit the Webcast, you'll have the opportunity to provide us with some feedback. It's optional but it's very valuable in terms of helping us provide you, the audience and participants, with the information to help advance your programs in the future.

I'll give to Lauren Pederson from ICF International who's going to explain GoTo meeting.

Slide 3: GoTo Webinar Software Logistics

Lauren Pederson: Thanks, Neelam. You'll be muted throughout the Webcast in order to minimize background noise. And you'll be able to submit your questions and comments in writing and I'll show you how to do that on the next slide. The PDFs and audio files of today's session will be made available at the following link. And actually part one and part two are posted so you can go ahead and access those files. Throughout the Webcast, if you have any technical difficulties, you can reach me at that e-mail address, lpederson@icfi.com. Next slide.

Slide 4: Questions (GoTo Meeting)

And this screenshot will provide some information on how to submit a question. You'll submit it through the question pane which is on the "GoTo Meeting" console. We'll compile these questions and ask them at the end during the question and answer session. And you should include the name of the presenter you would like to answer your question; that would be great just so we know how to categorize the questions. And as you see here at the right circle, view any of your question and then we'll compile those. Next slide.

Slide 5: Optional Feedback (GoTo Meeting)

Neelam Patel: Thanks, Lauren. And I meant – this is Neelam. I mentioned at the beginning that there will be an optional exit surveys so we have about six questions we'd like to answer – for you to answer. Some are multiple choice and some are open-ended. So please, you know, stay at the end of the Webcast and take a minute or two to share those with us.

Slide 6: U.S. EPA Local Climate and Energy Program: Goals

Before we get in to today's topic of Financing Clean Energy Programs, I just wanted to provide a little bit of information about our programs, the EPA Local Climate and Energy Program. What we try to do is help local governments reduce their greenhouse gases and we partner with other programs or experts. And today you'll be hearing from experts on financing to help advance private mitigation program. And one of the other things we try to encourage is looking at multiple benefits and on the slide that you just had on your screen, there's a list of the benefits that you can think about as you make the case for your programs.

Slide 7: Local Climate and Energy Programmatic Elements

Some of the resources that we offer to help reduce greenhouse gas emissions are listed on this slide. There's tools, resources, peer exchange, our monthly webcast. But the one thing I would like to highlight is that we do have a group of 50 communities that have innovative projects that can help – you think about how to reduce greenhouse gases in your own communities. And these projects have a lot of innovative and replicable elements. And one of those projects is especially here on the call today. Keith Canfield is from the Clinton Climate Initiative is also a climate showcase because his program is also a part of the Climate Showcase Communities Program.

Slide 8: Funding Webcast Series

So as we mentioned earlier, today's Webcast is a part of a series and the link here show where you can access files from our previous Webcasts. We encourage you to check those out. And I won't spend a lot of time on building up to today's Webcast but we'll provide a quick overview.

Slide 9: Webcast 1: Recap - How Does Funding Fit Into the Planning Process?

Our first Webcast we talked about the planning process, how does funding fit in to your planning process. And here you can see some key areas where it's important to be thinking about the funding question as part of your initial discussions. And you can see that funding is interlinked to many parts of the process.

Slide 10: Webcast 1 Recap: What Do You Want to Fund?

The other things that we talked about in the first Webcast are some key questions that should be considered as you go through the planning process. And the answers to these questions can help influence the direction in which your program move forward. And again, I'm going through these quickly but this information is available both on our Web site and was e-mailed to you earlier today.

Slide 11: Webcast 2 Recap: Where Can You Find Funding for your Program?

In our second Webcast, we focused on where you can get seed funding to start your program. And this is – and this chart demonstrates the different types of source or seed funding that you can use. And we talked about the different types of self funding program, places where you can get internal funding from your own government operations. And also places where you can get funding from other partners or entities. And then the continuation of that discussion on seed funding is what we're going to talk about today through the financing conversation.

And just to give you another opportunity to talk about these types of programs, the Department of Energy is hosting a Webcast next week that focuses specifically on revolving loan funds. And Pat McGuckin who is going to be presenting in just a moment will also be speaking on this Webcast next week. And today you'll see him introduce some of the ideas that are going to be talked about on this Webcast next week when it comes to revolving loan funds.

Slide 12: Contact Information

This is my contact information and where you can get additional resources.

Poll Question #1

Neelam Patel: And what I'd like to do now is take the time to ask a poll question about where you're – where you are in terms of clean – financing clean energy program. And so that question will be coming up on the screen in just a moment. Please take a minute to answer this. And again, your responses are very helpful to us, not only as part of today's Webcast but also in the future as we think about how to meet your needs then help advance clean energy programs, especially building on a momentum from our funding, the American Recovery and Reinvestment Act.

You could enter your final answers to the poll question. And, Lauren, if you can share those results with us please.

Lauren Pederson: Sure. Twelve percent haven't thought of and don't know where to start as far as clean energy program financing. Fifty-seven percent are interested in financing program but need more information. Seven percent started implementing financing but would like to learn more. Eighteen percent are currently financing a program but to do things better. And 7 percent are successfully financing a clean energy program.

Neelam Patel: Well, this is great. And for the folks that had the largest response, 57 percent, interested in financing a clean energy program but need more information, you've come to the right place. Pat is going to go over some more details on the different financing options. And then for those of you that are interested but need more information – for those of you have a financing program but think they could do things better, you'll hear from the examples today and also get some insight on the tool a little bit from Niko.

So with that, I'd like to turn it over to Pat McGuckin from the Cadmus Group.

Financing Options for Your Clean Energy Programs

Slide 1: Title Slide

Slide 2: Financing Options for Your Clean Energy Programs

Pat McGuckin: Thank you, Neelam. Hello everyone. We have a lot to cover so let's just go ahead and dive in. We're going to be talking about four topics today. Very quickly some few keys to success, the five key elements of a financing program and then into the meat of the presentation talking about five – excuse me, nine different financing options ranging from revolving loan funds, on-bill finance, PACE PowerSaver and so forth. And then finally, three pages of information on financing tools and resources with links that maybe helpful.

Neelam Patel: Hello, this is Neelam. I just want to check in because I'm not hearing any sound.

Yvette Rincon: Yes, I'm not hearing – this is Yvette. We stopped hearing sound as well.

Neelam Patel: OK, great. Vanessa, can we just check in to make sure the conference call line is working?

Operator: Yes, it is working. It seems that the presenter disconnected.

Neelam Patel: OK. Well, while we're waiting for the presenter to come back in, we'll go ahead and move to the next presentation which will be an overview of the clean energy financing decision tool and that will be Niko Dietsch. So we'll be pulling up his presentation and I just want to thank the audience for your patience as we make this slight adjustment in the agenda.

So, I'd like to go ahead and turn it over to Niko Dietsch who is from our state clean energy and climate program.

Clean Energy Financing Programs: Decision Resources for States and Communities

Slide 1: Title Slide

Niko Dietsch: OK. Thanks, Neelam. And thanks for having me on this call. What I want to do today is just take a few minutes to tell you about a new EPA clean energy and financing resource and how it can help you choose the financing program and access related materials to help you dig deeper into the issue.

Slide 2: Available as a PDF

Before I get started, if you could maximize the size of your screen, we're going to be looking at some screenshots with are significantly small type. So, you want to – there're actually two pieces to this EPA financing resource. The first piece is a written guide and you can see the screenshot there, 57 pages on the issues you see here. It's designed to help you determine what the best financing program is for your local circumstances and issues.

And I think the target audience in terms of who might get most value from this resource or community is just getting started with clean energy financing programs. And it sounds like from the poll question that some of you are also just start working on existing programs that might want refresher on some of the basic financing issues or interested in finding additional tools or resources.

Pat, I should give credit to Pat McGuckin. Wherever he is, he had helped us develop this guide. And when you look at his slides, when you see his presentation, if the material that's presented there resonates with you, I would encourage you to look at this guide because he developed much of that material that comes directly out of here.

Slide 3: And Online

The next piece is this online version of the PDF guide plus an interactive decision tool, it's not included with the PDF guide and that's what I'm going to spend a few minutes today walking you through. So the purposes of this tool are, again, helping you get started and identify program that might make sense for you area and specific circumstances.

And I would just stress that, you know, while this is based on the best available information, everybody's jurisdiction has unique circumstances. So I would encourage you to talk with experts either on your staff or on contract so this is not intended to be the final word of what makes the most and to your jurisdiction.

Slide 4: The Decision Tool: A Guided Tour

So I think just to go through the tool quickly, here's a screenshot. There're a total of nine questions. As you answer those questions, the finance program options on the right are grayed out, meaning they're no longer relevant. And you should look further into the ones at the end of the nine questions are still in blue because we think those might make most sense for your area.

So we're going to have a quick scenario here to help walk through the tool and I'll be brief.

Slide 5: Our Scenario

Let's say you're a sustainability manager for a mid type city, climate and clean energy issues are new, there's no obvious source of additional funding or choice of clean energy programs. And you can post a project involving a public building because that's often a good place to start given those other bullet points above. So that's as far as you've gotten, let's look at the tool.

Slide 6: 1. Which sector will the program target?

First question is about – I think it's coming up. Yes, the first question is about the program target. And you look at the drop down menu here and you're decided in this scenario that a public building so that's what you choose.

The next slide is – oh I should note, when you choose public, the public option there on the list, the others on the right side, the financing program options turn gray. Because with the public sector targeted, several of these finance program options are no longer relevant.

Slide 7: 2. Will the program target borrowers with marginal credit?

So question two is about whether target borrowers with marginal credit should be looked at. And I think in this case, we're talking about a public building and we're going to stick with the default answer here which is no.

Slide 8: 3. Will the program offer subsidized financing?

And we'll go to the next question. And this is about subsidized financing and doesn't make sense. So typically, with subsidized financing, you might look at a program or say a third party lender could offer clean energy loans to a small business and buy down the cost of that loan. But in our scenario, the city is not going to pay for a better interest rate for itself. Thus, the answer is no for this question.

Slide 9: 4. Will the target market include tenant-occupied buildings?

With question number four, this get split incentive challenge where the building owner is typically the one who would pay for the building upgrade and efficiency improvements but the tenant would be the one who reap the value of those energy savings. And that's a significant barrier to energy saving. But for our scenario, again, all city building are city occupied and not tenant occupied so we'll leave this also with the answer no.

Slide 10: 5. Do you have access to funds that will not need to be repaid?

For number five, we're moving from questions about the target market, who we want to target with our program to available resources at community level. And this question asks whether you have access to funds you can spend as oppose to having to repay. And here I want to highlight another feature of the tool which is the help button.

Slide 11: Click on Help? at any time.

Slide 12: And a Help dialogue box will pop up

Let's go to the next slide. You know, you might wonder, you know, what does that question mean in fact? Then it pulls up a box that explains, you know, so what does it mean to have access to funds that will not be repaid. And in this case, tax revenues, system benefit funds, things like grants, those are all sources of funding that don't need to be repaid. Hopefully, that clarified the question. And we'll move to answer the question now.

Slide 13: 5. Do you have access to funds that will not need to be repaid?

We're going to propose for our scenario that the city council has indicated that they are willing, in fact, to support money to pay for the project. And the answer is yes.

Slide 14: 6. Can you take on additional debt?

So moving along, can you take on additional debts? We're going to assume in our scenario that the city council or whoever makes these decisions in your case does know that's not an option.

Slide 15: 7. Can you issue bonds to support this particular program?

Number seven is a question that deals with bonds which are a form of city debt but they don't necessarily need to be issued by the city. An example here would be case bonds where you might have an easier time getting approvals than traditional forms of borrowing. Let's say, though, in your scenario that a more research tells you that bonds are not an option.

Slide 16: 8. Has your state passed PACE legislation?

We'll go to question eight. It asks whether your state has passed PACE legislation. You might not know the answer to that. If you don't, there's a Web site there in the bottom right hand corner, pacenow.org which can tell you the answer. And in fact, it turns out that your state has passed PACE. But you look back at our scenario and PACE was graded out and this was because you've chosen the public market sector in question one and PACE doesn't apply to the public sector. So the answer there is no.

Slide 17: 9. Is on-bill repayment through local utilities a viable option?

Last question deals with on-bill repayment. And I think as many of you know, on-bill repayment requires the cooperation of utility. And in our scenario, unfortunately, the utility is not interested in supporting the idea of on-bill repayment. So we're going to say that's a no.

Slide 18: Four Financing Program Options might be suitable in this situation

So you've answered all the nine questions and you see that the four program options remain, revolving loans, performance contracting, rebate, and solar leases. And you can click on one of these in the next slide just to see what more information about this as option. But let's click on performance contracting, you'll see a box comes up and it gives you some detail on what performance contracting is, how it can be used to as most likely to benefit from performance contracting. And that's where we are.

Slide 19: Click on an Option

Slide 20: To see a brief summary

If you'd like more detail than what's here, again I'd refer you back to the PDF version of the decision guide which goes into more debts.

Slide 21: A Final Note

So as a final note here, like I said, this decision resource from EPA does provide access to additional information for where to go if you're interested in digging deeper than beyond what's there. And I encourage you to look at these resources, compiled in the back of the guide.

Slide 22: Contact Information

So that's it for the presentation. If you'd like more information about the tool or have other questions, here's my contact information.

Neelam Patel: Great. Thank you, Niko. And what we'll go ahead and do is go back to Pat who will give us a little bit of an introduction to the nine different types of financing options. And I think that's where he lost off when we lost him. So, Pat, are you back online?

Pat McGuckin: I am Neelam.

Neelam Patel: OK, great.

Pat McGuckin: I apologize to everyone. I feel snake bit here. I'm not sure what the problem was but we'll dive in now. Neelam, very quickly, we'd gone through this slide before the line was cut?

Neelam Patel: I think so. I think…

Pat McGuckin: OK.

Neelam Patel: …we were going to the keys to success.

Slide 3: Before We Start

Pat McGuckin: OK. It is important to note here that the presentation is based on the decision guide that Niko just went through. And the reasons that's important is that even with the high level overview that I'll be giving you, 15 minutes isn't enough time to go through one of the financing options. We didn't want to shortchange the case histories so let me just suggest that if we don't get one of the financing options that you're particularly interested in, you can refer either to the presentation that you should have received this morning via e-mail or you can refer to the decision guide itself which is where you'll find the most details.

I also want to note that although the focus here of this presentation is on energy efficiency and renewable energy, a financing is maybe feasible for any program that generates revenue or savings.

Slide 4: Keys to Success

Keys to success. The first one is to not reinvent wheel. Take advantage of what other programs have learned both the good and the bad. There are two links here that can be particularly useful then seeing if there are other programs out there that have done something similar to what you're thinking about going.

Second, you want to provide low monthly payments. You want the energy savings to be greater than the loan payment. And the way to do that in part is to reduce the loan payment. That's fairly obvious but what may not be obvious is to ask the question, well, which does more good,

to lower the interest rates or to increase the term of the loan? It might be helpful to know that, generally, the term of the loan has more impact than the interest rates. So if you had the choice between cutting the interest rate in half or doubling the term of the loan, you probably be better off doubling the term.

Third is to establish broader eligibility. At least that seems like that for the one of the goals. Borrowers with excellent credit ratings can get loans these days for the purpose of a financing program ought to be to reach out to some of those borrowers who may deserve credit but can't get it in the current lending finance.

And finally and this is really important, a great financing program by itself is not going to be successful. The history is littered with financing programs who went out and they were not connected to a program that was effectively marketed and executed and did not work very well. One of the key elements here is to make it easy for contractors to introduce financing to the borrowers and for borrowers to quickly get preliminary loan approvals.

For example in the Keystone Health Program, a contract working on the spot suggests that the homeowner make a call to the program phone number and find out, and of course of a single phone conversation whether or not at least on a preliminary basis, it looks like they can be approved for the loan.

Slide 5: Key Elements of a Financing Program

Five of the elements of a financing program ranging from target markets to funding sources and security and so forth, you see in yellow text some examples for each of these different categories for a PACE program. Let's talk about each one of these individually.

Slide 6: Target Markets

The target markets, it's easy to think about the residents market as being either reactive or proactive. The reactive market is marked by an urgent need to replace the failed furnace during the middle of winter or an air conditioner in the middle of summer.

The homeowner or businessman doesn't really have much of the choice whether or not they're going to replace the equipment. It's just a question of whether or not they're going to buy the cheapest new furnace they can or whether they're going to buy an energy efficient furnace. And that's where financing can come in. A special financing for the high efficiency furnace can help influence that decision.

The proactive market is more for planned improvement. The thing to know about the reactive market is because it doesn't rely on the homeowner, the volunteers, the equipment has to be replaced. But typically a residential program targeting the reactive market oftentimes goes faster and generates more, results more loan volume quickly than a proactive market. Proactive market is probably larger though.

Let's see, the other one to talk about here is public sector in schools the idea that taking on debt may require a voter approval. And so non-debt options like leases and power purchase agreements may be a more effective – a more palatable option for that sector.

I'm not going to talk about every one of the bullets on these pages in the interest of trying to get to the financing program options as quickly as we can. But you see the rest of the bullets here.

Slide 7: Funding sources

For funding sources, we can talk about loans, bonds, leases. The thing about loans is that we generally found a local lenders whether it's a community bank or a credit union or a community development financial institution on which is typically referred to as a CDFI are often more responsive than the larger regional and national lenders. Still worth checking the larger lenders but this is what our experiences. And bonds are another possible source, in particular, QECBs can offer a very attractive low interest rate in 2 percent range. That's an inexpensive source of funding.

Tax exempt lease purchase agreements are also definitely worth looking into. This would be for a municipal project. Let's say, for example, a whole building of a retro fit for a municipal, let's say, a city hall. One of their big advantages is that these lease purchase agreements are not normally treated as debts so there's no need to go through a lengthy and expensive ballot process. I'll just refer you back to Webcast two where we talked about other sources of funding.

Slide 8: Security

Security, there are unsecured loans where they – think of a credit card, for example, where the decision of whether or not to extend credit is based on a credit score, employment sect and that sort of thing. These are best for the reactive residential markets that we just talked about where seed is really crucial. And somebody with a failed furnace isn't going to wait two weeks for a loan decision.

Liens, typically think of a mortgage where debt typically are first mortgage represent the first lien on the building. And that just falls in line behind tax liens and that would include PACE liens.

And then, you just realize that there are other sources of security as well like utility disconnect that you got an on-bill finance program. That can be a pretty powerful motivator to pay the – make the loan payments.

Slide 9: Credit Enhancement

Credit enhancement, you'll hear today from Little Rock where they used the loan loss reserve. Security worked hand in hand with credit enhancement. In the case of the loan loss reserve, it's a situation where the program sets aside money to cover losses incurred by a third party lender. Reserve typically covers just between anywhere from 50 percent of each individual loan all the way up to 100 percent of each individual loan loss.

And up to, you know, oftentimes, 10 to 20 percent of the total loan pool, although, we've seen pieces where it's fully 100 percent of the total loan pool. So, the idea is that by helping to cover losses and reduce the risks as incurred as the lender to participate in the program and perhaps offer a lower interest rate or longer terms and to maybe extend eligibility.

The nice thing about it is that it can offer some very significant leverage. If you've got $100,000 that you can put in to a loan loss reserve that's guaranteeing 10 percent of the loan pool, that equates to a $1 million loan pool that the lender is going to put up.

Loan guarantees are similar except that the guarantor does not actually set aside the money, for example, HUD's PowerSaver Loan Program. They don't actually put any money in the lending institutions, they just know that it's got the full PACE and credit of the United States government behind it. Then there are some other options like debt service reserve and subordinate financing that you don't see very often.

Slide 9: Origination and Servicing

Loan debt could be originated in service. It can be done in-house. It can be done by a third party administrator or a financial institution and so forth. In-house can be feasible if you're talking about, for example, a commercial sector loan program or industrial where you got a few big loans issuing.

And particularly if you have an agency that has some experience with revolving loan funds or other types of lending. Many programs are using a third party administrator. There's a link there to Michigan Saves as an example. The financial institution can be the one to originate any service loans. Keystone Health in Pennsylvania is an example of that.

Utility on-bill finance. In the past, utilities have been the one who have provided the loan capital and originated a loan and serviced them but we're seeing more and more a move away from that. Utilities don't like becoming a lender typically.

And we're seeing a move towards more third party administrators or financial institutions where the utility is just providing the vehicle in the form of the utility bill for collecting the loan payments. And that's one of the reasons why you're seeing the name on-bill finance start to be replaced by the term on-bill repayment. And then you'll hear today from Little Rock about the idea of employer payroll deductions where the employer actually plays a role in servicing the loan.

Slide 11: Financing Options

Here are the nine financing options. You've already heard Niko talk about them a little bit. You saw them in the decision tool. Let's go through each one individually and we'll get as far as we can.

Slide 12: Financing Options: Rebates

Rebates are not really financing tool per se but many agencies that receive stimulus funds were considering rebates. And it was useful for the decision resource to include rebate as an option so that it could be compared with financing options and see what the advantages and disadvantages are. The advantages are relatively quick and easy for the customer or consumer to use as well. They can be very effective at encouraging program uptake.

As a matter of fact, we've seen instances where we've had a chance to witness the impact of an attractive rebate versus an attractive interest rate. And it seems as though in those instances, given a choice between a rebate or a low interest rate, people are oftentimes more inclined to go with the rebate, the money in hand. It's probably not surprising there.

The other nice thing about rebate is that they're broadly applicable across all sectors and measures and it can be modified fairly quickly. They provide a sense of urgency as well to consumers to take advantage as they typically have a deadline for when the rebates are going to be available or when they run out.

The disadvantage of rebates is that they're not sustainable. Once the – unless you have a continual source of funding for a rebate program, one that money runs out, the program ends. And the other disadvantage is the leverage is not as good as other options.

Slide 13: Financing Options: Revolving Funds

Revolving funds. We're going to take a minute on this because there's something that can make this very attractive under certain circumstances. The revolving fund is where you have an amount of money that you lend out and as the loan payments come back in, you use those payments to rebuild the loan fund and make a next round of loan and then a third round and so forth.

The advantages, again, faster and simpler than most other options. It's broadly applicable across sectors and measures and they can offer good leverage overtime. It's important to note that the volume of lending drops off after the initial round. Let's say that you have a million dollars to lend and you lend it all out in year one and you lend it in a form of loans under a five year term. What that means is that in year two, you'll receive back roughly $200,000 in loan payments and that's all you'll be able to lend in year two.

So in year one you lend a million dollars, in year two $200,000. That's not necessarily something – a reason to not do a revolving loan fund but definitely something that you want to keep in mind. It can have kind of a yoyo effect on work force. And the other thing is that revolving loans do not normally grow although you're going to see here in a minute one option that can change that significantly.

Slide 14: Financing Options: Revolving Funds continued

Here's a graph, it will take just a second to do this. Let's say that you have a project that cost $100,000 and has a savings per year of $50,000. That's not realistic for many projects but it

might be for low hanging fruit lighting project perhaps. So if you look at the graph, you've got $100,000 – let's say that you have $100,000 to start your revolving fund. You've acquired that money from somewhere.

Refer back to the funding Webcast. You spend $100,000 in year one to fund the project. And then you spend two years diverting the savings from those improvements back into the fund. And then after those two years, you can see the green line where $50,000 per year savings can go to the department that sponsored the project or into the city's general fund. This is assuming that we're talking about a revolving fund that's targeting the public sector.

Slide 15: Financing Options: Revolving Funds continued

Here's what happens when you start revolving that. That first loan that you make in year one, the first two years of payments are used to then rebuild the funds that the second project can be funded. And then the first two years of savings from that can go to project three and so forth. You see at the end of 10 years you've been able to do five projects and that initial $100,000 investment has generated an ongoing source of $1 million worth of budget savings in 10 years and $250,000 per year in budget savings going on from there. So that's the way a typical revolving loan fund might work.

Slide 16: Financing Options: Revolving Funds continued

Let's consider an option where instead of once the fund is repaid, the money starts going in to the general budget. Let's consider what happens if for two years after the fund has repaid, the money continues to go in to the fund to grow it. And you see that here. You see that the first two years in yellow are repaying and then the fund is being rebuilt even greater. So at the end with this one loan, at the end of four years, your fund has grown from $100,000 to $200,000.

Slide 17: Financing Options: Revolving Funds continued

Now if you then revolve that, you can see the compound nature of what happens. And over the course of 10 years, you've now been able to do 21 of these projects and your savings are now at the $1 million per year mark, all starting with $100,000 investment in year one. So that's just if you got a city with municipal buildings that could use retrofits, lighting improvements, things like that.

This could be an option for building a pretty significant and once you've done all of the city buildings and city projects, that fund has grown to the size where it can then be current to perhaps the private sector, helping commercial buildings make progress.

Neelam Patel: Pat?

Pat McGuckin: Yes.

Neelam Patel: This is Neelam. I just want to step in and point out the Webcast I've mentioned earlier, we'll talk more about revolving fund. And also encourage the audience to submit

questions on anything that Pat has covered. And these few options that he'll cover in the last two minutes of his presentation. So, again, I just really encourage the audience, if there are specific financing options you are interested in, please submit questions to us so we can answer them during the Q&A and also include that in your exit survey.

Thanks, Pat.

Slide 18: Financing Options: Property Assessed Clean Energy (PACE)

Pat McGuckin: Thank you, Neelam. Property Assessed Clean Energy (PACE). This is an option really now just for the commercial sector. Fannie Mae came out and effectively shut down most residential programs. There are still a few that are going on, Sonoma County for example. But starting a new program in the residential sector would be, I think, risky at this point. Some programs are moving forward. Florida has a number of programs that are being developed and so I just would point out that there are some risks inherent there and that PACE programs can be somewhat complex and time consuming to implement.

Slide 19: Financing Options: Credit-enhanced Private Loans

Credit-enhanced private loans. We did talk about loan loss reserve a little bit ago. This is a program that encourages third party lenders to make attractive loans. There are some specialized lenders that have opted to sell programs. Keystone First, for example, uses ASP first. These are scattered around the country. The nice thing is that a relatively small loan loss reserve can support a very large third party loan pool.

The disadvantage is that the specialized lenders do not have the capital to hold the loan. They have to – they just have a warehouse capability. They can make the loans but then they have to turn around and sell them to somebody. And there is no secondary market available yet for these kinds of loans. There's a lot of work going in to that and hopefully there will be soon. Starting a credit enhanced program from scratch can be difficult without the help of an experienced partner.

Slide 20: Financing Options: HUD PowerSaver

We'll do one more and then call it quits. The HUD PowerSaver, they selected 18 lenders nationwide for a pilot program. This is for residential loans. They're backed by HUD loan guarantees. Advantage, no cost to you to the local government, although, marketing support may help grow the program and maybe necessary to help persuade the lender, one of these 18 pilot lenders to operate in your community. And there's no limit on the growth of the program.

The disadvantage is that only these 18 lenders so far have been authorized for this program and it might not be slam dunk to get them to operate in your community. And also HUD has limits on where PowerSaver can be offered. It has to be either a better buildings grantee or a home performance with energy star territory. There is some flexibility on that so if you think you really have a good residential retrofit program and can push some volume, then by all means go to the link above and try contacting the 18 lenders that have been chosen. Don't stop with just one. You may have to go through all 18 to find out that's of interest.

And with that, I'm afraid that we'll just have to leave the other four options for you to look through the design guide.

Slide 21: Financing Options: On-Bill Repayment

Slide 22: Financing Options: Energy Efficient Mortgages

Slide 23: Financing Options: Performance Contracting

Slide 24: Financing Options: Power Purchase Agreements/ Solar Leasing

If you have any questions, we'll try to address those. I will point out that there are these one, two, three, actually four pages of additional links with good information on financing in general. And so please refer to those as well. I'll look forward to taking your questions and please don't hesitate to send me an e-mail at anytime. And I'm happy to answer the questions for you that way too.

Slide 25-28: More Information on Financing

Slide 29: Contact Information

Neelam Patel: All right.

Pat McGuckin: Thank you, Neelam.

Neelam Patel: Thank you, Pat. And while we did skip over the last few financing options, the power purchase agreement and solo leasing will be covered in our last presentation today. So we will get an in depth look at that particular financing option. And as Pat said, please submit your questions and we'll make sure if we don't answer them, let's say, on the call, we will certainly follow up with written responses after the Webcast is over.

Home Energy Affordability Loan (HEAL)

And moving into our case studies, we have Keith Canfield who's going to talk about the home affordability energy loan program. And as you're tuning in to Keith's presentation, keep in mind that they are actually, the Clinton Climate Initiative, Keith and his colleagues are looking to replicate this project in other communities. So if you find this interesting, tune in to what you think would work for you and why you think it worked and then you can reach out to Keith after. So with that, I'm going to go ahead and turn over to Keith.

Slide 1: Title Slide

Keith Canfield: Great. Thank you, Neelam. Hello, everybody. We're thrilled to be on the call today so thanks for having us. I just wanted to say briefly that the William J. Clinton Foundation since its creation and after President Clinton left office has had a climate focus as a core value through the program we called the Clinton Climate Initiative. And that includes a building retrofit focus both on the commercial and residential side. And the Home Energy Affordability Loan or HEAL loan is the residential program of the Clinton Climate Initiative.

Slide 2: Heal

So, you know, we kind of look at excessive energy use as not only something that harms the environment but is also a real harm or a wound to the homeowner as well. And they're the ones that are taking into the pocket, so to speak, about paying too much for the utility bills. So this program with our partners of which, of course, the Climate Showcase Community program is a valuable partner to us. It is – this program has been really pushed forward by our partners. And, again, as Neelam mentioned, we're looking to replicate this in other markets.

Slide 3: Employer: Energy Upgrade Catalyst

The whole premise behind the HEAL program is that the employer is a great catalyst and aggregator for residential retrofit demand. And if you think about it, an employer really is a great place to reach out to large masses at once. And the way the HEAL program works is it positions itself much as a 401K provider or a flexible spending plan a provider would to an HR department. In other words, we want to make it as turnkey as possible for that employer to bring energy efficient retrofits upgrades to their employees.

So we try to build the program in a way that makes it painless for an employer to implement. So we'll go in to the employer. We'll handle the marketing, the sign up of their employees. We'll coordinate the audits, retrofits, QA. We try to do it all so that the employer – so they would offer this as they would in the other employee benefit.

Of course the benefit to the HEAL program, is that for the most part, people look at their employers as being credible platforms to receive and provide information. And again, as I mentioned, they are great point source aggregators. We work with employers that are small as

60 to our largest employer who has 10,000. So it's a great way to reach out and touch interested parties and mass.

And then lastly is a term that we've pointed around here a bit is that there are source of credit agnostic financing. And I'll come back to that one in just a minute and tell you kind of what that means and how we see it. First, let me just walk through very briefly the program and how it works.

Slide 4:

If you look on the left side, we do have a commercial component in most of the partners that we work with where we'll go in and do a audit of their own facilities, their commercial or industrial facilities, find them places to save money in their facilities, and then ask what they take some of those savings and capitalize an employee loan fund.

Again, we'll come in to that partner. We'll do the marketing engagement. We'll do the energy audits in the homes and we'll facilitate the upgrades. And in some cases, we will also either augment or replace that employer financing with a third party financial institution and/or utility partner. And I'll talk more about those options in just a bit.

So if an employer chooses to make a commercial retrofit and use those some of those savings to fund the employee lending part of this equation, it actually ends up being a no cost or low cost program for them to roll out. And the environment that we've had over the last few years, many employers are looking for ways to offer benefit programs that they've been restricted – financially restricted from offering over the last few years.

Slide 5: Credit Agnostic Financing
So the credit agnostic financing piece comes in with what we call the employer model. I'm going to show you two variations of the HEAL model. Both of the models I'm going to show you use payroll deductions for repayment of any retrofit associated loans. And neither of the models relies on home valuation or equity for as part of the equation. And you can imagine in many parts of the country that is essential these days that we try to find financing options.

The first model is the one I just described to you where the industry – what we call the industry finance model where they either, as a portion of their savings or just from their operating capital, do a loan vehicle that provides all or part of the retrofit cost to the employee and then recovers that over a payroll deduction over a some of period of time. The reason that we consider that credit agnostic is that employers look in at risk – an employee risk differently than financial institutions.

If you think about it, if an employer is looking at whether an employee is really worthy of a loan, they think of things like seniority, employment history, the history of employer reviews, their non-financial metrics. And that, again, that makes a pretty attractive and compelling financing option for particularly for those low to moderate income or credit challenged individuals.

Slide 5: Third Party Financing

In the event that an employer cannot or will not make the loans, there's a third party financing option. And actually this was not part of the original HEAL program. This is what the Climate Showcase Communities grant from the EPA. It allowed to us to pilot and refine. And that is – we actually use this for a large hospital that's a state owned, part of the state university system here in Arkansas, as well as on municipalities. City of Little Rock actually implemented the program as well.

Neither one of those could make direct loans to their employees, but both of those individuals had – or both those institutions had credit unions that were already attached to them and they were very enthusiastic about adopting this program and we're able to leverage their existing relationships. They already had payroll deduction capabilities for these employees. So they were actually able to step in and make the loans for the retrofits for these employees. And the city was able to do a payroll over the hospital because they will do the payroll deductions.

So it worked identically to the employer based model and actually one that we've been very pleased and appreciative that the EPA saw fit to help pilot. We did use a loan loss reserve on one of those institutions where we actually we're able to lower the interest rate for those participating homeowners by another one and a half to two percent. So it's in the three and a half percent range for a unsecured loan which we think is outstanding.

Slide 7: Why Credit Unions are Interested

You know, what we've found, although there are fairly plenty of financial institutions out there, we've found that credit unions have been very good partners. Particularly if they're already engaged in that employer that is part of the HEAL program. So they're constantly looking for new loans and products to offer their existing members. And they're looking for ways to expand their membership.

So it's really a nice win for all parties. They already have a lot of the payroll deduction process. And they look at this actually as being a program that helps mitigate some risks for them because we've already some of that on the front end with the participation criteria that the employer may set, so a minimum of link of employment for example, would be one way that that might manifest itself.

Slide 8: Reality Check- Altering Behavior

I will just mention briefly this one slide is that there is a change in behavior between the two models, the one that is strictly employer finance model versus the third party. It's almost just the hint of having to have some sort of a financial credit check or assessment does change the uptake. So just be aware of that and it's part of the things we've learned along the way is how to work with that and mitigate that to some stretch.

Slide 9: Engaging Utility Program Partners

The other part of the program that is an optional part but we think a very important one is the participation of the local utility or utilities in the program. And engaging in those partners has been another a little part of our learning process. There's two ways to do this, you can participate in existing utility programs that are provided and about looking at what their objectives are, what the public service commission or utility commissions set as the mandates to the state and participation of the utilities.

And an important part is to then take your program information and match that up to their existing goals. If they're looking for energy efficiency reductions and energies that are due to energy efficiency measures, you and the data you collect now can actually make a very compelling for the utilities on how they're meeting those PSD requirements. So you actually can become quite an ally to them in helping them prove the value and the effectiveness of their program.

Slide 10: Utility Partner Custom Programs

Slide 11: EEM Frequency Metrics and Influence of Rebates

Other than tapping into existing programs, we have here in Arkansas gone through a public service commission, utility commission approval where we have designed and implemented with the largest natural gas provider in the state energy a specific rebate program based on HEAL participation. It's a very effective program but there is a much longer lead time, of course, between program design and the regulatory process. So it can be very effective but you really have to have a longer planning horizon to probably get those enacted and in place in order to benefit the program.

And again, the benefit or the commonality on both those is really know your utility, know the public service commission requirements and tailor your program so that it really benefits all parties at all.

Slide 12: Takeaways

So just to kind of wrap up and do the takeaways on this. Again, the employer model is an excellent place to gain some scale and to really tap in to some existing credibility and, of course, the marketing opportunities for having employers on board are fantastic. You know, many of them have e-mail systems, e-mail blast, employee newsletters, closed circuit TV systems. It's all there for you to tap in to.

And then the – again, partners that can be optional but we think are very beneficial can be the third party financial institutions. Again, credit unions have been a very good fit in our experience and the utility rebate programs. Not only can they increase uptake through the rebate design and implementation but they also can pay a part of program cost. Again, if you work with them to meet their objectives, they are willing to sometimes pick up some of the program administrative cost to do so.

So with that, I'll reiterate what Neelam said that at the onset of the call and that is that we are – the Clinton Foundation is looking for a few good partners. I guess that's back in still the old recruiting phrase. We're looking for a few good partners to really take this other parts of the country and other regulatory environment to scale it. And that's what we're here to do. And so if you do have an interest in maybe exploring this model and how it might be deployed within your program or in your municipality, please shoot me an e-mail and let's have some dialogue.

Slide 13: Thank you

Poll Question #2

Neelam Patel: Great. Thank you, Keith. We're actually going to ask a question about your program. And the question is really about which aspect of the HEAL program participants would be most interested in? And if the participants, if you could please take a moment to answer this question.

Your answer to this question will not only help us here at EPA but, as Keith mentioned, since they're actually looking for expressions of interest in adapting their program, it will give Keith and his colleagues a sense of what others out there are most interested in. So if we could see the results to the poll question.

And it looks like there's a diverse interest across the potential options or the different components of the HEAL program in giving utility partners always a strong team we're finding when it comes to the funding financing question and working with employers to market, as Keith engaged, employee. Great. Well, hopefully that will be useful not only to those on the phone to know the diversity of the program to understand the interest and the different types of – the different elements of the program but also some kind of initiative of Keith and his colleagues.

So now that we've spent a little bit of time focusing on renewable energy, I'd like you to envision, excuse me, talking about energy efficiency, to transition to talking about solar renewable energy. And we have Yvette and James from the city of Sacramento who are implementing a two-phase deployment of solar in their community. And they're going to share with us their lessons learned from the first phase and talk about some of the cost effective elements of their program. So Yvette and James.

City of Sacramento Solar Power Purchase Agreement (SPPA)

Slide 1: Title Slide

James Christensen: Hello. Thanks, Neelam. This is James Christensen with Yvette Rincon. So what we're going to do is we're going to discuss how we use the PPA process to get solar installed on multiple city locations.

Bear with – there we go.

Yvette Rincon: There you go.

Slide 2: Solar PPA

James Christensen: OK. We use the PPA model for a variety of reasons and basically the most important one is that was a third party doing the PPA. They can finance, design, engineer, purchase, install and maintain the solar PV system throughout the duration of the contract with PPA. And the advantage to them is they can take advantage of state and federal tax credits. They also get accelerated depreciation. And that you can also take advantage of the utilities from the incentives.

The federal tax credit is typically 30 percent of the cost of the solar. And that's something that the city couldn't take advantage of. By them taking advantage of these credits, the city, if they purchase power from them at reduced cost. And so that's how it comes back and pays the city.

Slide 3: Background

Some background, in 2008 we awarded a fair amount of Energy Solar American Cities Grant. It was worth $200,000. That grant was split up in the city with different goals. One of the goals – one that today was to lead by example and PPA and get solar installed. Our goal is to get 4 MW of solar installed on city property. In addition to that, our other departments worked looking at developing this local solar industry and breaking down near and long term barriers to make it easier this solar install.

In addition to all of these going on, one of the key components that help make us successful was early on in the process we negotiated with our utility companies SMUD and we're able to secure some very good incentives. Without these incentives, being with the other credits that PPA provider can take, the project would have never worked.

Slide 4: Leading by Example

So first we issued the RFP qualification. We were fortunate enough to have (Keith) working in these different jurisdictions to assist us. We had people within the city from a couple of different departments. We had people at state and other agencies and we create this flex committee to be our proposers to give us their proposals. The election committee went through the proposals and

shortlisted three firms. While we had three firms shortlisted then we took them out to the site. They reviewed each of the sites that we had chosen and then went back and did actual bids with numbers. And at the end, we received a ballot financially viable bid that we were able to start negotiations with.

The key to successful competitive bid process is to definitely do your homework ahead of time. You want to see what others have done. You can see what the city of Sacramento has done, the city of San Jose, see what works, what doesn't work. While we were going through our process, the city of San Jose was doing the same thing. They had a couple with different issues and they just don't times before they finally found something that would work for them. And we learn from that and that made our process one of its I think.

When it comes time and you negotiate the PPA, a lot of the firms have PPAs that have been bedded by their financing company. And if you can use their PPA without making too many modifications to it, you end up with a little bit easier process. And that's pretty much what we did. We started with the company's PPA contract, both with our attorneys and their attorneys and then we negotiated with that and eventually we came into a negotiated contract that everybody could live with.

And then finally on top of that, you've got to have support from your upper management. So city manager's office and your council have got to see they're supporting you so that once you've done through all of this work and you're ready to present it to them, that bill on board all along.

Yvette Rincon: Just to add on the doing your homework, what also was done ahead of time was we provided all of the firms with two years worth of electricity, so that each site that had already been in evaluation on each site to make sure that we're structurally liable if we were going to go on the roof with the solar. So that I think also saved a lot of time. We didn't just say tell us what you want to do but we directed them to specific sites in the city.

James Christensen: I end with that. It helps a lot and a lot of you will find because we get down what we actually ended up doing. Out of those 11 sites, we ended up with four sites and Yvette will talk about a little bit more.

Slide 5: General Terms and Conditions

I'll just review some of the general terms and conditions that ended up in the PPA. Basically, a 20-year agreement, we have the option at two additional terms of five years each. We start out with the dollars per KWH cost at the beginning of the project or for year one and then for each year after that for 20 years, it goes up by 2 percent. That number can vary quite a bit and in our negotiations 2 percent was the number we ended of that.

You have options to buy a system. You can buy it back in 20 years. If you decide to terminate any time during the 20 years, they have there the termination value for each year so you have to go through that. You don't want to terminate or purchase the system prior to your stick.

Because in the first five years, the PPA provider has taken advantage of the tax credit, the depreciation, and the incentives to get from the utility company.

So it would be very costly to do it during the first five years. And in this – on our project, the REC renewable energy credits, with the utility company and that enabled the PPA provider to have the largest incentives available which are paid through a 5-year period.

Slide 6: Phase I

As I indicate earlier, we started out 11 sites. We looked at them and we bedded them, you know, they were the potential sites in the city standpoint but once we got our PPA provider on hand and review them with them, some of the sites started to fall for different reasons. In the end, we ended up with these four sites here. City Hall, we just want one of these on City Halls. We ended up with a small 20kW system at city hall. It only provides 1.5 percent of the energy but the hope there is to have a key message there and using it as an educational tool for people that come to City Hall to see what we're doing.

We are development services building. We ended up with 423 KW system that's provide about 22 percent of the energy for that building. And that is 24th Street Corp yard, one of our large ones of around 800 KW. That's providing over 56 percent of the energy used here and then we have actually two systems out there that combined the 650 KW and they're providing 60 percent of the energy out there. All of these systems are online right now except for City Hall and it will be very shortly.

Slide 7: Phase II

OK, phase two we're moving right along. We're actually going – getting permits for these. It should be issued this Friday. Construction is about to start. Equipment is showing up on site as we speak. These two are on water treatment plants. They are both. One of the treatment plants has, you know, very large size so even with the over a megawatt at fair variance, it's only 12 percent of electricity used by the plant. And then at Sacramento Water treatment plant, you can see it, you know, a little less than 400 KW. That's only 30 percent. But this should be some really good systems and we're really excited if we were able to add these programs.

OK, Yvette.

Slide 8: Helpful Facts

Yvette Rincon: Yes, OK. So just to share after your helpful facts to put these two phases in some perspective, if you're not too technically inclined. On phase one with the total of 1.9 megawatts and that comes to about 8,000 panels that are being installed. And the equivalent, again, that might make sense is powering up to 250 homes. So that the electricity generated from the system or these multiple systems will power about 250 homes.

And most of the systems, all of them except for the one on City Hall are all Carport structures. And that's really, I think, a lesson learned for myself or something surprising. If you would ask

me at the beginning of the project, I probably would have guessed that all the systems had gone on the roof just because that seems traditionally how it's been done.

But we learned that the Carport structures provided multiple benefits. One, they're providing shade to our employees and customers. And then two, by staying off the roof, we don't have to deal with any of the roof statement issues or create additional problems on our roof because we'd penetrated the roof now that we have solar up there. And so it makes maintenance of facilities a lot easier.

And then on phase two, again, we're doing 1.5 MW. And that's about 5,700 panels. And then all of these are ground mounted. And the benefit – what that means is that they're just a few feet off the ground. And this is the least expensive design system for solar. So, again, whenever you're planning solar, whether it's Carport structures or Ground mounted, you'll take in to consideration both the benefits and the ability. So at our water treatment plants, it made sense to put them on the ground because there's no one in that area that's going in and out generally and it's just the less expensive system.

Slide 9: Unique Component

One of the unique components of this project was our ability and our learning from San Jose and that we – like most jurisdictions are in a bad physical situation. So what we did is we built into our power purchase agreements a way to recover our administrative cost. And what that means is after we signed the contract with the solar firm, we negotiated them paying us for our staff time going forward.

So reviewing the design, purchasing any other equipment that might be needed and then mostly with staffing cost because we have to let them in and out of our facilities. James has to review all the design at the onsite during construction and trouble shoot and issues that were coming up.

So for phase one, we decided on that admin cost would be 14 cents per watt. And what that equals was about $268,000. And when we were first doing this, this was our first project of this nature and we thought 268 thousand. Again, it was kind of guessed estimate.

And then what happens is that C just gets – this cost just gets rolled in to our 20-year agreement with the solar firm. But, again, it's a way of doing a project at no cost to your jurisdiction. So then when we moved into phase two and negotiated that project, we found that we could lower that key to 5 cents per watt which was about $75,000. And, again, this is just two sites that we're going to now so the cost was a little less. And so we think probably looking back, we probably would have been a little bit comfortable if we would negotiate at 7 cents per watt. But, again, we think that which.

Slide 10: Rebates per Megawatt

I also wanted to give you a sense of what types of rebates because every project is going to be unique. And what every utility rebate levels will be different across the U.S., I am probably certain. So what James was mentioning is we negotiated some really good rebates with our solar

– or our utility company early on. And this chart here gives you an idea of what level of rebates we got. I don't think this exist in the state of California anymore. So I'm not sure in other states whether they're this high. So far you see it stepped down.

The first megawatt was 35 cents. And basically that equaled covering 49 percent of the cost. And then you just use that down out for our second megawatt, 42 percent of the project cost is covered – is going to be covered for rebates. These are all performance based rebates so the solar company will get these over the next five years as they demonstrate performance. So, again, this just gives you an idea of one of the financial aspects of the project.

Slide 11: Economics

Next, what's most interesting to me is the economics. James was able to put some really detailed material together for us to determine what's the worst scenario and then what is the best case scenario in this project. So what this table shows, the numbers within the table show the average annual savings from the project under two scenarios. This scenario on the right hand side is the best case scenario. It's rates – no, it's the worst case scenario. It's if rates from our utility company don't go up at all for the next 20 years what does our financial situation with this project which is, you know, best to worst case scenario, we don't expect utility rates to not go up for 20 years.

And then the column on the 3 percent is what is the business-as-usual funding number that our utility uses. So they expect rates to go up by three and a half percent every year. And of course there are gaps where there aren't increases and et cetera. So this just gives us ourselves and our policy makers the ability to look really quickly at the financial aspect of the project.

So even in the worst case scenario for it to never go up and our PPA goes up by 2 percent every year, we're still on the block overall at the city. You see $3,700 for City Halls, DS, Corp Yard, were out $7,000 a year on Solid Waste Services. So this was one of our key components to help us evaluate the project and be able to communicate to our decision makers about the viability of this project.

Slide 12: Lessons Learned

And in final, I'll just wrap up with some lessons learned. Again, economies of scale matter. You know, we had 11 sites identified and when the solar firm came in, they proposed much larger solar arrays at a number. Only four or five or six sites so that's really helped dropped the cost from the project. I already covered staying off the roof and then good analysis matters.

I think good analysis include understanding the risk aversion of your jurisdiction. And like I mentioned, our analysis, you know, had the outrageous perspective of what if rates never go up. What's the worst scenario? But maybe you're jurisdiction can handle a little bit more risk. So you need to know your risk tolerance and then builds your financial analysis based on that.

And then finally, it takes the team – James and I have been part of the team. We had attorneys, we had out utility, we had people from the state, and we also had someone from ENRO who was

also advising so it took a pretty large team to put this project together. Technically it's very complex. And there're a number of issues that can come up from the policy side all the way down to the installation and construction time.

So with that, we'll wrap up. Thank you.

Poll Question #3

Thank you, James and Yvette. So we did hear the interesting lessons learned from the city of Sacramento. And one other thing they did discuss is how to negotiate a contract. And each community has priorities when it comes to negotiating contract. So I just want to ask a question here about what your prio – what's your highest priority, your top priority when negotiating contract to achieve either energy efficiency benefit or renewable energy?
And, you know, there's applied system or the other financing options that had been covered as well. If you could take a minute to give us your feedback so we understand the way communities are approaching contract negotiations when it comes to clean energy programs.

And if you could go ahead and show the results, please. And it looks like that the top priority is generate cost saving for the local energy budget which is a very important element of the negotiation. And I think during the Q&A, maybe we can get into a little bit more detailed discussion about that very issue, the cost saving for the local energy budget.

And before we – before Pat talks about his wrap up slides, I did want to pronounce that we're going to closer to end of our time. And once Pat is done, we will continue with the Q&A session which will be over the allotted time. But what we will also do by hopefully Friday evening to all the registered registrants for the Webcast, we will send out written answers to all of the questions to make sure people will get the information that they were looking for on today's Webcast.

So before we do dive in to the questions, we are – Pat is going to spend a few minutes wrapping up not only what we heard today but connecting it to the first and the second Webcast of the series. Pat.

Putting It All Together

Slide 1: Title Slide

Pat McGuckin: Thank you, Neelam. If you attended all three Webcasts, you've seen that we talked about laying the ground work for putting together a financing program or funding a program, finding funding, and then adding financing to create your own successful strategy. Here's a graphic that wraps up, summarizes what we talked about in the three different Webcasts.

Slide 2: Putting It All Together

And the first one that we talked about planning, the highlights we're talking about engaging the stakeholders and then evaluating your resources and your program needs. In terms of engaging the stakeholders, they are your internal stakeholders like your city council, for example, department heads, utilities, external stakeholders are very crucial to understand what those rebates are. Businesses and employers you heard today from Little Rock about what great resource large employers can be and so forth.

If you were on that first Webcast, you heard how Arlington went through this process of engaging the stakeholders and actually had some funding come out of that process. Two of the participants in the stakeholder engagement process ended up giving $100,000 to the city to help funds some work, some energy efficiency work and study.

Evaluating the resources, we talked about that and program needs. And at the end of the planning process, we've talked about how in Bellingham, Washington it was so crucial that they had already gone through this process. So that when grand opportunity came along, they weren't having to start from scratch with putting together a proposal for the grant funding. They already knew what they wanted to do. They had the stakeholders engaged and so forth and were able to put together a winning proposal for that grant.

In Webcast two we talked about funding. We broke down into self funding, internal funding, and external funding. And in the self funding category, we talked about behavioral options, behavioral changes that can provide energy savings, energy efficiency and renewable energy. You heard about how in Philadelphia, the school district, they used the very low hanging fruit of energy efficiency operates savings to help create a fund that they're now working with or heading towards working with. Internal funding we talked about bonding out budget allocations and so forth. External funding we talked about utility rebates and incentive.

And then finally, in today's Webcast, financing, we talked about the key elements and the five key elements. And we talked about – actually I think we missed one there, origination and servicing. We didn't have room for without the getting slide too small. And then under programs, we talked about nine different financing options. If you were on the second Webcast, you heard Orlando talked about the revolving loan fund.

Today you heard about Little Rock and the Clinton Foundation describing their credit enhanced lending program using the loan loss reserve. And then you heard today Sacramento talking about their power purchase agreements and solar leasing. So this is kind of Cliff notes version that might be handy to refer back to as you work through the process of developing your own funding for your program.

Slide 3: Putting It All Together (continued)

And then finally, what if you go through that planning process? You have engaged the stakeholders, looked at your resources, decided what sort of a program you want to pursue and it hasn't come together for you. You haven't uncovered a particular source of funding. You're not for exact what program you want to do. Well, first of all I'd point out that today you heard that the Clinton Foundation is looking for good partners.

So that's a residential program, residential/commercial program is something that's a possible interest to you. Your process of planning may have just identified a new option. But if after all of that you still don't know what to do, here's a course of action that almost any community can do. And that's the first focus on your public sector where you have some control over the program success and can recycle the energy savings to grow your efforts and to grow your fund.

Start with the lowest cost program such as behavioral changes and recycle the savings to start growing the fund. And then target projects that are low cost and quick payback. And defer the budget savings for a time to grow your fund. Those were the slides, the charts that you saw showing the impact of compound growth.

And then at that point, if you've grown $100,000 initial seed funding that came from maybe behavioral changes into a million dollar fund, then you can start thinking about expanding to longer payback projects, continue to grow the fund and then maybe split off some of the fund or all of the fund to focus on the private sector.

And with that, I will open it up for – back to Neelam for questions and answers.

Neelam Patel: OK, great. Thank you, Pat.

So for the audience, I'd just – like I said, it is past time but what we're going to do is go ahead and close out with one more poll question. And then we will go through some of the questions that we received. But we will make sure that everybody who is on the call or is registered for the call does get a copy of those answers. So if you can't stay on the call because you do have another meeting, we understand.

But the last question really relates to Pat's putting it together. And what we'd like to know is based on having understanding of the planning, funding and financing elements, what topics would you like to learn more about? So please take a moment to read these answers and read these responses and provide an answer.

Great, thank you. And if someone from an ICF could just give us a sense of what the most common response was.

Lauren Pederson: With 48 percent saying identifying reasonable project investments for the community.

Neelam Patel: Great. Well, that is something hopefully we can answer in the question and answer session. And what we'll do is start off for the next few minutes just answering – asking each presenter one question. So ICF if you could go ahead and start off the question.

Questions and Answers

Wendy Jaglom: Sure and thank you. And so the first question is for Keith. What did your programs average size loan and how long was the average term involved?

Keith Canfield: Thanks for the question. The average loan was probably net of rebates was probably right around $1,500. And the employer chooses a term that they wish to offer and that was either a 2 or 3-year term depending on the employer.

Wendy Jaglom: Thank you. So the next question is for Yvette and James. Why did Sacramento County pursue solar if they're giving the REC to the utility? What end goals do they achieved?

Yvette Rincon: The reason we were pursuing the project was to basically demonstrate environmental leadership in the community in a financially viable manner. And the reason the utility got the REC was because they offered at higher rebates if they own the REC. And for them owning the REC meant they would be able to comply with the state law that requires that they generate clean energy. So for us it was about leadership as well as contributing to clean energy production in our community. And then on the back end we get some financial savings from the project as well.

Wendy Jaglom: OK, great, thank you. So the next question is for Pat. Do you think offer energy efficiency mortgages to customers or is this something that you have to search for?

Pat McGuckin: That is a great question. It is typically banks. There aren't very many banks that offer the program. There is – gosh. You know, the only one that I'm aware of that is really pushing the program is the Bank of Colorado based in Fort Collins here in Colorado. If you want to find out more about their program, you can just Google Bank of Colorado and you should be able to find it fairly quickly.

But for example if you have a lender in your community, particularly a local lender, credit union, CDFI that seems to be interested in working with you and you think that an energy efficient mortgage might be something that they would be willing to consider, then I would encourage you to get in touch with the Bank of Colorado. And I know that the folks there would be very happy to share with you what they're doing and share their success and help you come up with the program for you, your community and your interested lender.

Wendy Jaglom: OK, great. Thanks, Pat. So the next question is for Niko. The tool presented at the beginning of the Webinar indicated that PACE is not available for public entities. In contrast, the participants' understanding was that PACE was only available to public energies. So could you clarify what type of entities are eligible to participate in PACE?

Niko Dietsch: Yes, Pat, do you want to grab that one?

Pat McGuckin: I would be happy to grab that one. The problem with public entity is that PACE is a model where the repayment of the funding is done through a special assessment on the

property taxes. The problem with public institutions is that they don't pay property taxes. So while it's not impossible, I have heard that there are some jurisdictions where a country assessor or a city assessor is willing to add public properties to the tax role simply to be able to collect a PACE assessment.

I have not heard of – a matter of fact, I can't even remember what the one jurisdiction where there was an assessor that was willing to do that. So that seems to be, well, not insurmountable or pretty major obstacle to using PACE for public sector projects. But certainly it can be used in commercial and residential, theoretically.

The problem with the residential market is that Fannie Mae, actually the Federal Housing Finance Agency that supervises Fannie Mae and Freddie Mac came out with their directive that pretty much put an end to PACE for the residential sector. The concern was that after a mortgage lender had made a loan, that would implement a PACE assessment that in the event of foreclosure withstand in front of the mortgage. And if the mortgage were already at its limit in terms of loan devalue, then the PACE assessment would take it over that limit. And so while residential is still technically feasible, it would be probably a risky thing to go after at this point. There are some jurisdictions in Florida that are pursuing it. They're being very careful.

The commercial sector, we're seeing it in San Francisco and Los Angeles kind of a unique form with micro bonding, micro lending. And that maybe an interesting option as well. Still in my book a little bit too early to tell and will probably require a fair amount of word to see how that – to implement that model. But it's one that could work. So I hope that answers the question.

Neelam Patel: Great. Thank you, Pat. And I would like to thank all of the participants that are still on the line and the presenters for joining us today to talk about their case studies and provide us with this general background that we need to get started with understanding financing programs.

Again, we will have all of the audio files and presentations available on our Web site, the U.S. EPA Local Climate and Energy Program. And we will send out answers to all of the questions that were discussed today during the Webcast as well as the written ones that we did not get to say.

So thank you very much for joining us. And we look forward to continuing to help you build on the energy efficiency and renewal energy program that are out there. Take care.

Operator: This does conclude today's conference call. You may now disconnect.

END